

REMARKS

Applicant respectfully requests reconsideration of the application.

IDS

An IDS was submitted on July 18, 2006, prior to the last Action being mailed. Applicant requests consideration of this IDS. In addition, another IDS is being submitted with this amendment.

Priority Claim

A priority claim claiming priority to October 1994, among other dates, was submitted in the Amendment of April 2005, along with a new application data sheet, yet the PAIR system does not reflect the priority data accurately. Correction of the priority data is respectfully requested.

Prior Art Rejections

Claims 1-4, 6-9, 11-14, and 26, 28, 91-92 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,444,779 to Daniele ("Daniele") in view of U.S. Patent No. 4,179,212 to Lahr ("Lahr").

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daniele and Lahr in view of U.S. Patent No. 5,473,631 to Moses ("Moses").

Claims 10 and 27-29 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniele and Lahr in view of U.S. Patent No. 5,249,166 to Hamilton et al. ("Hamilton").

Claims 1-4, 6-9, 11-14, and 26, 28, 91-92 and 94 are patentable over Daniele and Lahr

Claim 1 and Dependent claims 2-4, 7, and 91-92

As clearly shown in Figs. 5 and 6 of Daniele, the glyph markings are clearly visible. The glyph markings are placed in the blank margins of the page so as to not interfere with the text on the same page. While Daniele notes that the glyph code itself "is not readily discernable to the person attempting to make an unauthorized copy," the markings used to carry this code on the margins of the document are clearly visible. The glyph markings do not modify the text characters on the page, but instead, are in the background and are primarily in the margin. No perceptible signals in the document are

modified with imperceptible modifications as claimed. Instead, just the opposite occurs. Namely, blank areas of the document are marked with perceptible glyph markings.

At page 3 of the final Office Action, Lahr is cited as disclosing that the “embedded plural-bit auxiliary data is imperceptible to the user.” Lahr discloses electrically conductive material on printed matter to indicate that it is copyrighted material or to provide a specific electrical conductivity characteristic of a specific publisher. Alternating bands of varying width are proposed to provide digital coding. While the material may be imperceptible, it is not an imperceptible modification to perceptible parts of visual or audio signals that are included in digital material as claimed. Digital audio or visual signals are not modified in Lahr’s technique. Instead, a physical coating material is applied to paper. If the visual information on this paper were captured in digital form, the resulting digital image would not include any data carried in this coating. In contrast, the plural-bit embedded data of the claim is included in the visual or audio signals of the digital materials that are digitally distributed.

In view of the above, the combined teachings of Daniele and Lahr do not teach all of the elements of claim 1. Lahr does not teach: “digital source material including visual or audio signals that are perceptible when output from a device, and the visual or audio signals including imperceptible modifications to perceptible parts of the visual or audio signals to embed the plural-bit auxiliary data in the perceptible parts in a manner that is imperceptible to a user.” Therefore, Lahr does not teach the missing elements from Daniele. As such, the combined teachings do not teach all the elements of claim 1.

Further, one of skill would not be motivated to combine Lahr with Daniele to make the invention of claim 1 because the conductive coating material in Lahr does not form part of the visual information on a document in Daniele’s system and would therefore be separated from the document information if this visual information were captured and distributed digitally.

Claims 2-4, 4 and 91 are patentable over the combination of Daniele and Lahr for the same reasons as claim 1.

Regarding dependent claim 92, neither Daniele nor Lahr teach: “wherein the entertainment content is different from the encoded source material and is provided from a location remote from the steganographic decoder” in combination with the other claims

elements. The Action references Figs. 5 and 6 of Daniele, but these Figures do not illustrate the elements of dependent claim 92.

Claim 8 and Dependent Claim 9

The Office apparently contends that Daniele teaches “decoding audio source material” because glyph codes can be decoded from the margin of pages with musical information printed on them. The Office then combines Lahr as allegedly teaching embedded plural bit auxiliary data that is imperceptible to the user. Applicant believes that this interpretation is unreasonable. Nevertheless, to avoid any doubt, claim 8 is amended to recite: the audio source material including an audio signal that is audible when output from a device, the audio signal including modifications to embed the plural-bit auxiliary data that are imperceptible to the consumer.

The combination of Daniele and Lahr do not teach all of the elements of claim 8. Further, there is no motivation to combine Lahr with Daniele to make the claimed invention because the conductive coating in Lahr is not applicable to encoding data in digital audio signals.

Claim 9 is patentable over the combination of Daniele and Lahr for the same reasons as claim 8.

Claim 11 and Dependent Claims 12-14 and 94

Regarding claim 11, the combined teachings of Daniele and Lahr do not teach: “receiving a digital object steganographically encoded with plural-bit auxiliary data, the digital object including perceptible visual or audio signals with imperceptible modifications that have been made to encode the plural-bit auxiliary data in the visual or audio signals of the object. Previously, claim 11 recited “an object” and then referred back to it as “the digital object.” This issue has been addressed by adding the term “digital” before “object” in line 2 of the claim. The claim recites a digital object including perceptible visual or audio signals with imperceptible modifications that have been made to encode the plural-bit auxiliary data. As noted previously in context of claim 1, Daniele teaches making perceptible changes to parts of a page where there is no perceptible information, and Lahr’s approach of adding a conductive material does not make imperceptible changes to perceptible visual or audio signals in a digital object.

Claims 12-14 are patentable over the combination of Daniele and Lahr for the same reasons as claim 11.

Regarding claim 94, the Office has cited Daniele at col. 10, lines 1-25, but it is not clear which aspects of this part of Daniele corresponds to a transaction in which content related to the object is provided to the user, and payment is specifically associated with providing the content related to the object to the user. Nothing in this passage appears to correspond to the additional elements recited in claim 94.

Claim 26 and Dependent Claim 28

Claim 26 is also patentable over Daniele and Lahr. Daniele and Lahr do not teach: “steganographically inserting at least a first group of said bits for benefit of an end-user of the music signal by imperceptibly altering audible attributes of the music signal” in combination with the other elements of claim 26. While there are several reasons why the combined teachings do not teach the elements of claim 26, this is an example of aspects of claim 26 that Daniele and Lahr do not teach. Lahr is cited as a method of imperceptibly altering perceptible attributes of the music data. But, Lahr teaches a conductive material on a document, which is clearly unrelated to music and specifically, does not relate to imperceptibly altering audible attributes of the music signal as claimed.

In addition, the Office has not established that Daniele’s glyph code or Lahr’s conductive material include the claimed first, second and third group of bits as recited in claim 26. Claim 28 is patentable over the combination of Daniele and Lahr for at least the reasons provided for claim 26.

Claim 5 is patentable over Daniele and Lahr in view of Moses

Moses does not teach or suggest the missing elements from Daniele and Lahr identified for claim 1. Therefore claim 5 is patentable over the combination. Moreover, Daniele and Lahr make no reference to audio signals as recited in claims 1 and 5, and therefore, there is no motivation to combine these teachings.

Claims 10 and 27-29 and 93 are patentable over Daniele and Lahr in view of Hamilton

Claim 10

Daniele, Hamilton and Lahr fail to teach: “detecting the presented audio source material with a microphone, and decoding the auxiliary data from the audio signal within a microphone output signal.” Daniele refers only to a visible marking approach usable only on documents and is not applicable to audio signals. Lahr pertains to a conductive coating placed on paper which is inapplicable to audio signals. Hamilton refers to reading digital audio data stored on an optical disk. In particular, it refers to the use of a laser to read digital data encoded in pits and lands on a CD. It does not teach detecting audio with a microphone, nor does it teach decoding auxiliary data from a microphone output signal as claimed. The combination of these references fails to teach all of the elements of the claims.

Claims 27-29

Daniele, Lahr and Hamilton fail to teach any method for altering music signals to steganographically insert plural bits of watermark data as claimed. Therefore, the combined teachings fail to teach all of the elements of the base claim 26 as well as the dependent claims 27-29.

The claims should now be in condition for allowance.

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Respectfully submitted,

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